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ABSTRACT

There is no accepted definition and no adequate measure for the concept of Emotional Intelligence (EI). Some of the myriad issues surrounding EI are discussed here. One problem in the conceptualization of EI is the confusion between the terms "feelings" and "emotions." Differences between the two are examined and a working definition of feelings is offered. To further refine the concept of EI, the Style in the Perception of Affect Scale was developed to measure skills in the integrated, rapid, and effortless awareness of changes in body feelings that constitute the prompts for emotions. Accurate and rapid awareness of the feelings, it is suggested, allows for accurate and rapid emotional and behavioral responses. Without this skill, responses tend to be delayed and inappropriate. Analysis shows that this style of perceiving feelings correlates highly with mental health, contentment, creativity, and personal warmth. It is theorized that this style, by utilizing the subject's feeling awareness of the subtleties in the communications and responses of other persons, is the foundation also for empathy and social intelligence, which are qualities often grouped with EI. It is further suggested that this skill in rapid attention to changing bodily feelings may promote self-healing. (AUTH)

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Emotional Intelligence: Components and Correlates

Michael Bernet, Ph.D.

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Emotional Intelligence: Components and Correlates

Michael Bernet, Ph.D.

There is no accepted definition and no adequate measure for the concept of Emotional Intelligence. SEPOAS, the Style in the Perception of Affect Scale, was developed to measure an overlapping concept, skills in the integrated, rapid and effortless awareness of the fine nuances of change in the patterns of body feelings, that constitute the prompts for emotions (the feelings being defined, for this purpose, as purely somatic sensations with no cognitive content). Accurate and rapid awareness of the feelings, it is suggested, allows for accurate and rapid emotional and behavioural response; absent this skill, response tends to be delayed and inappropriate. Analysis shows this style of perceiving feelings to correlate highly with mental health, contentment, creativity, and personal warmth. It is theorized that this style, by utilizing the subject's feeling awareness of the subtleties in the communications and responses of the other, is the foundation also for "empathy" and "social intelligence," qualities that are often grouped with Emotional Intelligence. It is further suggested that this skill in rapid attention to the fine nuances of changing bodily feelings may be conducive to the natural self-healing process, and may therefore correlate with resistance to, and recovery from, disease.

"Your body has a mind of its own of which your mind has no knowledge."

John H. Pilsum, *Delightism*, 1972 (Prentice Hall)

Before we can discuss emotional health and emotional intelligence, I suggest that we need to distinguish clearly between "feelings" and "emotions."

According to Averill (1994, p 379), "The terms 'feeling' and 'emotion' are often used interchangeably, . . . 'feeling' is one of the vaguest terms in the English language."

Perhaps because of the "vagueness" of the term feelings, perhaps because of the confusion with drives, ideas, intents, and other concepts, many people—psychologists not excluded—appear reluctant to acknowledge the existence of feelings independent of cognitions. The long debate, whether feelings or cognitions have primacy in emotions, may never be resolved, no amount of experimental or philosophical proof will win over one side to the other's point of view. Resolution requires not so much the availability of new data or the availability of new philosophies, as a linguistic redefinition.

The battle between the somaticists and the cognitivists, has continued now for over a century, not unlike the impenetrable philosophical debates encountered by Lemuel Gulliver. William James (1884), while clearly expounding a somaticist viewpoint, set the scene for confusion in his famous statement "the bodily changes follow directly the *perception* of the exciting fact *and* our feeling of the same changes as they occur *is* the emotion [emphases in the original]." His statement suggests that the "feeling of the changes" in the body has bestowed an additional (cognitive?) dimension to the bodily

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changes. The feeling of the changes differs from the changes themselves, he suggests. "The changes" are somehow transmuted by "the feelings" into "the emotion."

Definitions of Feelings

Psychologists are quite adept at defining emotions, feelings, however, remains an uncharted area. In *The Nature of Emotion: Fundamental Questions* (Ekman & Davidson, 1994), until just yesterday, one of the definitive work on defining emotions, "feelings" and its derivatives is given 13 lines in the index with a total of 23 entries; by contrast, approximately 350 text lines and close to 700 entries in the index are devoted to "emotion" and its derivatives. There are only two references to the definition of "feelings"—and neither is of much help.

One of the definitions is Averill's (1994) confession of vagueness, as cited above. The other is by Shweder (1994, pp 32-33):

> "feelings" (both somatic and affective) have the shape and meaning of an "emotion" when they are experienced as a perception of some self-relevant condition of the world and as a plan of action for the protection of dignity, honor, and self-esteem.

"So now," as the apocryphal blind man said to Albert Einstein, "I know what the color white looks like."

Compare this with Shweder's masterful definition of emotions (p 37):

> "emotions" are neither "concepts" nor "things" nor "terms" in a language. They are complex narrative structures that give shape and meaning to somatic and affective experiences—feelings of the body (e.g., muscle tension) and of the soul (e.g., emptiness), whose unity is to be found neither in strict logical criteria nor in the perceptible features of objects, but rather in the types of self-involving stories they make it possible for us to tell about our feelings.

Perhaps what psychology needs most at this time is a National Liberation Movement for the Independence of Feelings (NLMIF) to lead the struggle that will ultimately let "feelings" stand on its own feet without being subsumed as some vague and trivial component of "emotions." Once we have permitted "feelings" the dignity of its own construct, independent of the construct "emotions," we can use it to understand, and define both emotional health and emotional intelligence.

Whether scientifically or philosophically correct or not, we need a word to describe "the feeling" itself, without any cognitive qualifiers, solely as the perception of somatic states. Perhaps the most appropriate name for "the feeling" might be "the feeling." From this perspective, feelings are the concomitants of changes within the body. Feelings are. They do not require evaluation to make them be. Some may be amenable to conscious awareness: the hands clench, the legs ready for flight, the skin tingles, the eyes soften, the lip relaxes. Some feelings may be beyond our regular perception, the body proceeding on its quotidian tasks as the blood flows, the stomach digests, the lungs re-oxygenate the blood, the kidneys excrete wastes—and we become aware of changes only as they deviate from the quotidian: the heart pounds, the lungs lose their capacity, the kidneys produce the adrenaline that elevates our mood or alertness.

These are all physical events. They happen naturally. They are essentially beyond our control, though we have acquired the skills to effectively deny or suppress the sensation or the appearance of a feeling that in its time and place is considered to have aversive

overtones—such as with the proverbial "stiff upper lip"—but the latent feeling is there screaming for attention even when silenced.

Feelings: A New Definition

The following definition may serve as a basis for further discussion: **"Feelings are physical sensations within the body such as of warmth, tension, pulsation, pleasure, pain, flow, and motion; they may occur at the visceral, muscular, vascular, surface, or any other level of the body. They are part of the striving for homeostasis."**

Feelings, according to this operational definition, are innate; they occur spontaneously within the body, regardless of the level of consciousness, awareness, arousal or intellect. Feelings are essential for homeostasis. Feelings signal departure from homeostasis and they prompt action ("action potential") to correct this. While at this point we are more concerned with the feelings as the promptings and action tendencies initiated in the limbic system that tend to lead to action or emotion, feelings may equally well represent events affecting the physical health, well-being and natural processes of the body; they are prompts to self-healing, an important aspect that will be touched on later. Feelings are the background "noises" of the body doing its work, coming to foreground awareness only when they deviate from routine, but with only little effort and attention, and perhaps practice, many hitherto unperceived feelings may be made conscious.

When feelings are evaluated and interpreted, at any level of consciousness, the *process* becomes an emotion. Raw feelings (i.e. physical sensations, that may or may not have reached the threshold of cortical awareness) may evoke responses in conscious mental processes (memories, cognitions and evaluations), or in unconscious processes (associations), or they may evoke additional physical feelings; any of these may in turn evoke further physical feelings that evoke more conscious or unconscious mental processes, and so on. If we are rapidly aware of the incipient feelings, and respond to them rapidly, correctly and without effort, our emotional and behavioral responses will be optimal. If we are not aware of our feelings, or block our awareness, or become confused about the patterns of our feelings, we cannot respond optimally. When suppressed, those feelings will prompt other feelings and associations, continuously expanding like a rolling snowball, until they reach a magnitude where the agglomeration compels inappropriate and uncontrollable emotions and behaviors.

The neurological processes involved in the evocation of feelings, and the resultant development of emotions, is beyond the scope of this paper. On a very simplified level, the feelings can be seen as promptings of the "nondeclarative" or "emotional" memories that are "stored" in, or guided by, the limbic system, specifically in the amygdala (LeDoux, 1994a, pp 311-312; see also 1986, 1994b, and in Ekman & Davidson, 1994, *passim*). Unlike "declarative memory" (essentially, memory mediated by the neocortex) "that can be operated on and modified by other kinds of declarative information . . . nondeclarative emotional memory cannot" (1994a).

These emotional memories, according to LeDoux, form part of our self-preservation system, prompting us to action based on the experiences of the past. As such, they may be protective at this moment, or they may be detrimental. The "emotional memories" without the cognitive processes that mark the "declarative memory," appear to overlap with what I call "feelings."

It is of special interest that "nondeclarative emotional memory" cannot be "operated on and modified by other kinds of declarative information." This appears to support the

contention that maladaptive responses that are triggered by "emotional memories"—or by feelings—cannot be readily corrected by cognitive processes—or by cognitive therapies. only an evocation of the "emotional memories" as they reside within the body makes them amenable to change. I shall discuss this further when I come to "Emotional Health."

A simile may make clearer the difference between a feeling and an emotion. If I compare this text (with all its involved symbolisms and its linguistic and philosophical content), now appearing on my computer monitor, with the concept *emotion*, the letters would represent *feelings*—nothing more than an alphabetical jumble. In fact the letters themselves are composed of pixels of light of varying color and intensity; and those pixels ultimately are nothing but electric impulses refreshed on my screen 73 times per second. The electric impulses, the pixels, and the letters, are no more equivalent to the text to which they contribute, than feelings are equivalent to the emotion to which they contribute. Like each letter that I perceive as I type it, each perceived feeling is composed of millions of electric impulses within the body, each a necessary contributor to the larger unit of "feeling," which in turn contributes to emotions.

Similarly, feelings can be viewed as component parts of a picture: a collection of pictorial elements, each composed of colors and brush strokes, each detail composed of oils and pigments on the supporting canvas. The totality of the picture (including classification and interpretation) can then be compared to "emotion." As one emotion may evoke another—perhaps more powerful—emotion, so the picture, which I have equated with the complexity of "the emotion," may evoke a *genuine*, even powerful, emotion. Emotions are certainly not all perceived equally by all; I assume that this text will stir up many different, perhaps mixed, emotions, from anger to pleasure, from boredom to excitement—although our physical perception of each of the many letters in this text can be assumed to be identical.

Feelings and Emotional Intelligence

Salovey & Mayer (1990), defined emotional intelligence as "the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions." Similarly, Thorndike (1920) had defined "social intelligence" as "the ability to understand others . . . to act wisely in human relations."

Howard Gardner (1983), describing the many "intelligences" that we possess, referred to an essential "internal aspect" of a person, the possession of "access to one's own feeling life—one's range of affects or emotions: the capacity instantly to effect discriminations among these feelings and, eventually, to label them, to enmesh them in symbolic codes, to draw upon them as a means of understanding and guiding one's behavior . . . At its most advanced level, intrapersonal knowledge allows one to detect and to symbolize complex and highly differentiated sets of feelings." Gardner also spoke of "interpersonal intelligence" which permits "a skilled adult to read the intentions and desires . . . of many other individuals and, potentially, to act upon this knowledge."

Lane and Schwartz (1987) described five levels in the development of emotional awareness; the highest "formal operational" level permits many nuances of emotion, a multi-faceted empathic awareness of others, a rich differentiation in quality and intensity of feeling, and the ability to blend different and often contradictory feelings.

I am unconvinced that a distinction between emotional intelligence and social intelligence is necessary or meaningful. In my view, rapid and optimal awareness of one's inner feelings subsumes the ability to monitor one's inner states that are responses to the nuanced changes in the environment—and the changes in the expressions of another's face, voice and body, are included among the environmental prompts to our changing feelings. With optimal awareness, as you and I interact, as my feelings change, so will my response to you. I will appease you or continue to please you, ease off when you display signs of stress, simplify my words when you are puzzled, attempt to stimulate you if you appear bored. You and I form a feedback loop; we recognize in our own bodies the responses we have evoked in the other's. The corrections are often automatic, effortless, and unconscious. We steer our interactions much as we drive along a highway with one hand lightly on the wheel and one foot on the pedal, adjusting automatically to the slight variations in the road surface. This awareness, via the body's feelings, is much more rapid, and much more person- and context-specific, than cognitively processed information such as learned appraisal skills. One improves one's social and inter-personal skills not by learning the techniques, but by permitting the body to read, and to act upon, the human interchange.

This ability is by no means limited to those with optimal awareness of feelings. Essentially the same skill is available to infants in responding to the promptings of the environment, as seen in their empathic connection with their mothers—even with other infants. It is available to animals responding to the "emotional states" of their fellows, of other species, even of their human companions. It is engaged in, for better or for worse, in all human interaction: between lovers, between patient and doctor, between bank customer and loan officer. We recognize it in daily life; actors simulate it, film directors direct it, and we recognize it readily, when shown on the TV screen. As the actors on the screen change their self-presentation, so will we move forward in our seats or backwards, smile or frown, stifle a yawn or reach out for another beer.

Social intelligence thus becomes a subset of emotional intelligence, rather than the other way around. As I unconsciously permit my limbic "consciousness" to monitor your non-verbal messages, and as I permit myself to respond spontaneously to the limbic promptings, I subtly (and spontaneously) change my responses to continue the desired quality of our relationship. I experience the empathic responses to your emotions. I adjust my self-presentation. Our interchange becomes optimalized. Emotional intelligence (defined as skill in the awareness of body-feelings) *ipso facto* affords social intelligence.

If, on the other hand, I attempt to suppress these inner prompting, or if I fear to trust those prompting or my responses, our communication will be less than optimal. Lacking the skills to utilize my bodily feelings, our interaction becomes as defective as if we were communicating over a barely audible telephone. If I lack those skills, our communication becomes impaired and I will score poorly on a measure of social intelligence.

The Measure of Emotional Health

As the ability to attend rapidly, appropriately and without effort to the experienced feelings leads to optimal response, the inability to attend rapidly, appropriately and effortlessly to the experienced feelings leads to self-damaging emotions and behaviors. The former is a necessary requirement for emotional intelligence and emotional health; the latter leads inevitably to emotional incompetence and emotional ill-health.

Table 1

Correlation of SIPOAS styles with selected factors of 16-PF (Cattell, 1993)

Primary factor scale and descriptors		BB	EE	LL
A Warmth	N=60	.43	-.24	-.40
warm, outgoing, attentive to others		(.001)	(.07)	(.01)
v. reserved, impersonal, distant				
C Emotional Stability	N=60	.28	-.46	.12
emotionally stable, adaptive, mature		(.03)	(.001)	NS
v. reactive, emotionally changeable				
L Vigilance	N=53	-.27	.38	-.06
vigilant, suspicious, skeptical		(.06)	(.01)	NS
v. trusting, unsuspecting, accepting				
M Abstractedness	N=53	.33	-.25	-.12
abstracted, imaginative, idea-oriented		(.02)	(.08)	NS
v. grounded, practical, solution-oriented				
N Privateness	N=60	-.13	-.17	.32
private, discreet, non-disclosing		NS	NS	(.02)
v. forthright, genuine, artless				
O Apprehension	N=38	-.30	.58	-.21
apprehensive, self-doubting, worried		(.07)	(.001)	NS
v. self-assured, unworried, complacent				
Q4 Tension	N=53	-.32	.50	-.13
tense, high energy, impatient, driven		(.02)	(.001)	NS
v. relaxed, placid, patient				

Statistical significance is shown in parentheses to two digits (except <.001).

Colloquially, the former is equivalent to the popular term, "Being in Touch With One's Feelings" (BITWOF), a concept that had always been held to be "good for you"—just like Popeye's spinach but, like spinach, no one had been able to show that it was truly good, or why it should be good. Even worse, while everyone was pretty clear about what spinach looks like and tastes like, there was no consensus on what "being in touch with one's feelings" was all about. SIPOAS (Styles in Perception of Affect Scale), a 93-item pencil-and-paper measure was developed to measure this quality of being in touch with one's feelings and to contrast it with two other styles, the one in which logic and reasoning are interposed between feelings and response, and another distinct style in which there appears to be great difficulty in interpreting one's feelings correctly, a style of rumination and self doubt. SIPOAS measure the strength of the preference for each of the three styles, the distinctiveness of which was confirmed by statistical analysis.

BB (Based on Body)—essentially BITWOF—reflects an effortless, integrated awareness of the fine nuances of body feelings that precede or accompany the awareness of emotion.

EE (Emphasis on Evaluation) reflects a style in which great effort is made to understand what is happening to oneself, often from the viewpoint of an outside observer, or in terms of imagined ideals or expectations.

LL (Looking to Logic) interposes logic between feelings and response, to control or avoid the potential discomfort or ambiguity of emotions. All three styles are found combined in each individual.

A total of over one thousand individuals participated in the final development of SIPOAS, which was validated through correlations with 31 measures and scale factors (Some of these correlations are shown in tables 1 and 2.)

Analysis shows BB to correlate highly with mental health, with awareness of small bodily changes, with social skills, contentment and creativity, and with reported past experience in therapies. EE correlates highly with neuroticism and its components, and with self-doubt and discontent. LL does not correlate with mental health but correlates with social reserve, and with emphasis on intellect over social skills and emotions. There is a strong correlation between BB and therapeutic experience; high-LL people, on the other hand, rarely seek out psychotherapy.

It appears that the BB style (i.e. being in touch with one's feelings), is a useful predictor of social intelligence and emotional intelligence.

Not surprisingly, members of Mensa—the society for those scoring among the top two percent in IQ—scored highest on LL and near the bottom on BB and EE; those from the mail lists of the Association for Humanistic Psychology and the International Primal Association, scored highest in BB and near the bottom on EE and LL. Those who obtained their questionnaires in a therapist's waiting room, or through postings on electronic bulletin boards dedicated to "problems in daily living," scored highest on EE: i.e. they tended to be unhappy, anxious or uncomfortable, and were looking for others to help them make sense of their feelings.

Age and Gender

Women, on average, scored moderately lower on LL than men; they tended to score slightly higher than men in BB, and in EE—i.e. women tended to place less emphasis on the intellect than men, to entertain more doubts about their feelings and their decisions, and to have slightly greater abilities in social and emotional intelligence; the gender differences appear, however, to be much more moderate than is popularly held.

Somewhat more surprising, those under 25 scored a full 66 percent *higher* points on EE than those over 65; the decrease with age was quite steady. Further analysis showed that when there was no therapy, increasing maturity led to increasing LL, i.e., increasing ability to use logic and reasoning to cope with feelings. When there had been therapy—psychotherapy, spiritual therapy or physical therapy—the subjects gained in BB, i.e., they became more in touch with their feelings as they aged. (SIPOAS appears to run counter to the majority of personality tests, which suggest that there is little personality change after the age of around thirty.)

The finding of a strong inverse correlation between age and EE—i.e. the style of tending to base one's thoughts and emotions on what one believes is expected—calls into question the value of basing attitude, values and other personality measures on the responses of incoming college students.

Emotional Intelligence, Emotional Health, and Emotional Therapy

Does psychotherapy change personality style? Does it increase emotional health and emotional intelligence? Which modalities of therapy are most effective? A controlled experiment, with a thousand subjects matched for age, diagnosis, severity etc., divided

Table 2

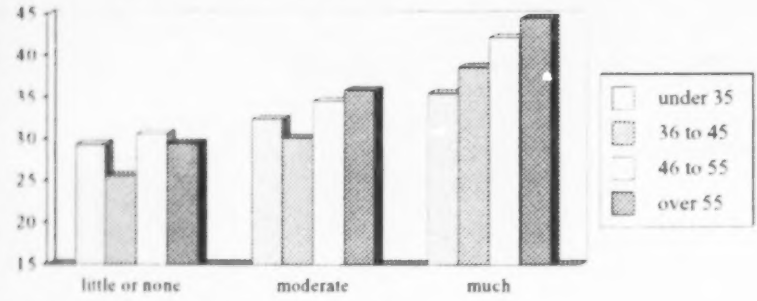
Correlation of SIPOAS styles with selected facets of NEO PI-R (Costa & McCrae, 1992)

Domain & Facet		BB	EE	LL
N1 Anxiety	N=106	-.36***	.55***	.02
apprehensive, fearful, prone to worry, nervous, tense, jittery v. calm, relaxed, do not dwell on things that might go wrong				
N2 Angry Hostility	N=106	-.26**	.29**	.10
tendency to experience anger, frustration and bitterness v. easygoing and slow to anger				
N3 Depression	N=106	-.29**	.51***	-.04
feelings of guilt, sadness, hopelessness, loneliness, dejected v. rarely experience these emotions, not necessarily cheerful				
N4 Self-Consciousness	N=106	-.32***	.58***	-.07
shame, embarrassment, sensitive to ridicule, inferiority feelings v. less disturbed in social situations, not necessarily poised				
N5 Impulsiveness	N=106	-.01	.21*	-.15
inability to control cravings, resist desires (regretted later) v. easier to resist temptations, high tolerance for frustration				
N6 Vulnerability	N=106	-.28**	.52***	-.06
difficulty coping with stress, dependent, panicked in emergencies v. capable of handling themselves in difficult situations				
Neuroticism Domain (sum of N1 to N6)	N=106	-.34***	.59***	-.04
behavioral or emotional maladjustment (e.g. fear, sadness, anger) v. calm, adjusted, even-tempered, emotional stability				
E1 Warmth	N=41	.47**	-.23*	-.26*
affectionate, friendly, like people, easily form attachments v. more formal, distant, reserved, not necessarily hostile				
E6 Positive Emotions	N=41	.31*	-.28*	-.06
cheerful, optimistic, laugh easily, experience happiness, love v. less exuberant and high-spirited, not necessarily unhappy				
O1 Fantasy	N=41	.36*	0	-.38**
vivid imagination, active fantasy life (not as escape) v. more prosaic, prefer to keep their minds on the task				
O2 Aesthetics	N=41	.25*	-.24*	-.03
appreciation for art, beauty, moved by poetry, music v. relatively insensitive to/uninterested in, art and beauty				
O3 Feelings	N=41	.35*	0.07	-.46**
feel happiness & unhappiness more intensely than others v. blunted affect, don't believe feeling states are of importance				

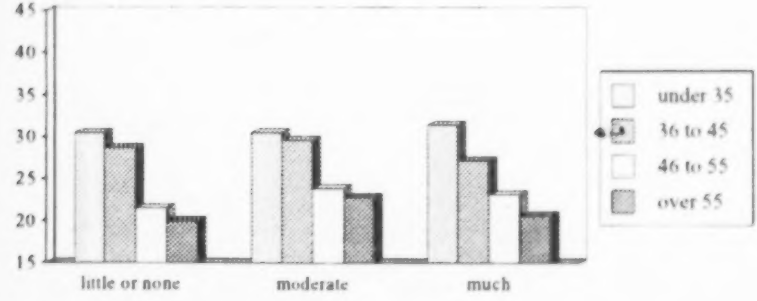
*$p < .05$; **$p < .01$; ***$p < .001$

into thirty groups, each subjected to two years of treatment/non-treatment by equally qualified therapists following a scripted therapy routine, is not, of course, possible. (I think it can be done, here and there, one modality at a time, and on a much smaller scale.) A survey approach was used instead: the thousand subjects in this study were

BB score (by therapeutic experience and age)



EE score (by therapeutic experience and age)



LL score (by therapeutic experience and age)

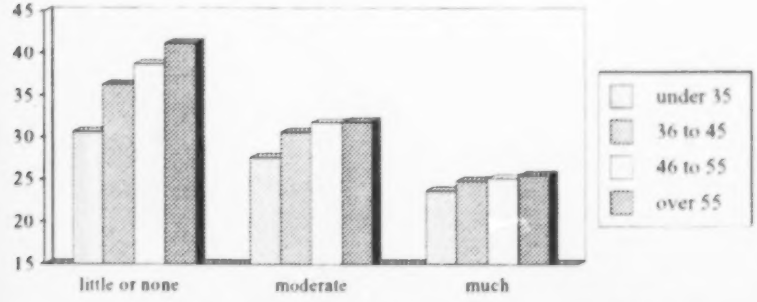


Fig 1 Effect of age and therapeutic experience on SIPOAS scores

asked to report, on a scale of 0 to 9, how important to their lives had been their experience in psychotherapy, in body therapies, and in spiritual disciplines (Personal "importance" appeared to be the most effective way to measure the influence of therapy, in the absence of reliably comparable information on variables such as the severity of their complaint, the change over time, the skills of the therapist, and so on.) We also asked subjects to similarly list the importance of their experience in thirty therapies or therapy-groups. From this, an "effect index score" was calculated for each therapeutic modality for each of the three styles, BB, EE, LL.

The "effect index score" cannot, of course, indicate cause and effect: personality style influences choice of therapy. A rigidly intellectualizing person with a high LL score, or a person with a high EE score, who is desperate to know how and what to think, is unlikely to choose a free-floating style of therapy where intellect is discouraged and each must discover his or her own answers to the questions of life. Nevertheless, there is much supportive evidence that would support the conjecture that experience in therapy *results* in raising the BB score.

Therapy and Change

What is it about therapy that causes a change toward a higher BB score? More important, what specific component in any specific therapeutic modalities improves emotional health?

The theoretical concept underlying the SIPOAS study suggests that learning to attend to the bodily feelings rapidly, effortlessly and appropriately is likely to lead to optimal emotional (i.e. cognitive appraisal of the feelings and emergent associations) and behavioral response, and that the inability to do so is likely to lead to maladaptive emotions and response. Emotional health correlates with BB.

According to LeDoux, (1994 a) "nondeclarative emotional memory cannot" be "operated on and modified by other kinds of declarative information." To paraphrase: emotions and behaviors that are prompted or mediated by memories from early childhood or by events of intense stress later in life, and are therefore mediated or evaluated by the limbic system rather than by the neocortex, cannot be effectively changed—never mind extinguished—by purely cognitive processes, *read* purely "talk" therapies. To be effective, the therapy must address the physical body directly and thus communicate with the "nondeclarative emotional memory" that is stored there. In Freudian terms: secondary-process approaches will not effectively change primary-process impulses.

An exploration of the properties of the individual therapeutic modalities showed that the modalities with the highest effect index score for BB tended to address the body directly, or involve altered states of consciousness, or stimulate direct re-experience in the here and now of the memories and experiences "stored" in the body (or in the limbic system), or encourage the patient to attend to the subtle changing feelings in the body. The body-related abreactive therapies—bioenergetics analysis, primal therapy, and Reichian—scored highest on the BB index. Not far behind were meditation, tai-chi, gestalt, and Jungian therapies. Also highly related with mean BB scores were psychodrama, encounter groups, existential, dance- massage-and person-centered therapies, and yoga. These therapies all tend to increase awareness of feelings in the body, and they rely least on "being in the head": in meditation we learn to seek and recognize fine nuances within the body; the abreactive therapies deliberately work on the events being experienced in the body (or "nondeclarative emotional memories"); massage literally touches; dance expresses the feelings of the body in motion; dream, imagery and spiritual approaches let the patient explore the self in a non-cognitive, primary-process-evoking, state of mind.

Physical, Spiritual, and Psycho- Therapies

Those who had experienced psychotherapy *and* physical modalities *and* spiritual disciplines had a mean BB score that was half as high again as those who reported little or no therapeutic experience of any kind. the mean for those who had only psycho-

Table 3

Mean SEPAS scores for combinations of experience in therapeutic domains

	N	BB	SD	EE	SD	LL	SD
No therapeutic modalities	169	28.02	9.68	25.02	11.52	37.69	11.7
Psychotherapy only	88	29.93	13.67	30.34	12.04	30.19	11.38
Psychotherapy + Physical	58	31.88	11.18	29.62	10.65	29.02	9.50
Psychotherapy + Spiritual	77	35.05	13.11	27.38	12.00	28.00	10.94
Psychotherapy + Physical + Spiritual	324	42.22	12.60	24.59	9.97	23.88	9.41
All participants in the study*	997	34.69	12.86	25.87	8.15	30.12	13.93

* Includes 281 participants who reported experience in physical or spiritual domains but not in psychotherapy, or whose experience in psychotherapy was not available or not calculated

therapy experience was, surprisingly, just 7 percent higher (possibly a sampling error) than for those who had no or only limited experience in any modality (see table 3). As we add physical and spiritual modalities, the mean BB score increases dramatically. There was an equally impressive decrease in the mean LL score; psychotherapy alone, or in combination with physical *or* spiritual modalities, all showed a decrease in LL; *all* three together showed by far the lowest LL mean score.

It appears that the most effective change in emotional health is brought about by a combination of psychotherapy with body and spiritual disciplines; this may have great promise for speeding the healing process and lowering the cost; additionally, most psychotherapies could probably be easily enhanced by incorporating elements that elicit more attention to the changing bodily feelings.

Emotional Health and Physical Health

Speedy and accurate attention to the subtleties of the changing bodily feeling, appears to be a significant factor in attaining optimal emotional and behavioral functioning. It is reasonable to speculate whether this skill will affect physical health in a similar manner. Those who are rapidly aware of the subtle changes in the body, may be able to spontaneously engage the body's self-healing powers at the critical moment of incipient disease or injury; denial or delay of awareness would obstruct and delay this natural process.

High-BB, the ability to rapidly and accurately respond to the cues within the body, may be synonymous, not just with emotional health and intelligence, but with resistance to disease and improved recovery.

The Type-A person, so the stereotype goes, becomes aware of disease only when stricken with the first myocardial infarction. The MI does not necessarily result directly from the Type-A's stress but perhaps more from the inattention under stress to the feelings in the body (Tye-A would correlate highly with high-LL); the typical Type-A speech pattern, as an additional example, is unlikely to be genetically linked to a predisposition to stress or to heart disease and, more likely, be a manifestation of the high-LL's inattention to inner cues, and to the environmental cues from his interlocutor. Very likely, the diseases that correlate with high-LL would be those associated with repressed awareness of feelings and the resultant neglect of the body; diseases of the cardiovascular system would generally appear to be functions of this process.

High-EE persons, confused by their feelings, may be more susceptible to the body's confusion about itself and to the body's inability to distinguish "friendly tissue" from "alien tissue," resulting in a greater tendency to diseases of the immune system and to lessened control over malignant tissues. In eating disorders, high-EE's, confused about the body's cues, may be more susceptible to bingeing and anorexia; high LL's, ignoring the body's cues, may be more susceptible to becoming overweight.

The time may be appropriate for research into the predictive power of SIPOAS for health and recovery. Does Style BB correlate with the maintenance of health and recovery from disease? Four areas that especially lend themselves to predictive, longitudinal, and retrospective studies are: the progression of HIV+ to AIDS, the acquisition of and recovery from cardiovascular disease, the survival rate from various cancers, and the reaction to allergens. If such correlations are found, the next step would be to teach skills in the awareness of subtle body feelings and to explore whether acquiring these skills will increase resistance to, and recovery from, disease and injury.

I would welcome any opportunity to be involved in such research.

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